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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/626,045	07/24/2003	Andreas Loew	PD020088	1452	
24498 7:	590 07/17/2006		EXAMINER		
THOMSON LICENSING INC.			LEE, MICHAEL		
PATENT OPE PO BOX 5312			ART UNIT	PAPER NUMBER	
	NJ 08543-5312		2622		
			DATE MAILED: 07/17/200	DATE MAILED: 07/17/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/626,045	LOEW, ANDREAS			
		Examiner	Art Unit			
		M. Lee	2622			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHI WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE as ions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONED	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)🖾	Responsive to communication(s) filed on 19 M	<u>ay 2006</u> .				
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-18 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.				
Applicati	on Papers					
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) according a policinary not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
	e of References Cited (PTO-892)	4) ☐ Interview Summary				
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	Paper No(s)/Mail Da				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurst (4,069,500) in view of Pham Van Cang (4,554,663).

Regarding claim 1, Hurst shows a repetitive cyclic test signal generator (see Figure 2d) except by forming a luminance signal by a sinusoidal oscillation whose amplitude rise and on which a DC component is superposed as claimed. However, Hurst teaches that it is possible by utilizing a test signal to develop on the display a luminance presentation that changes with saturation at a known rate (col. 4, lines 8-16). Pham Van Cang, from the similar field of endeavor, discloses a testing signal generator, which is able to generate a sinusoidal signal (col. 14, lines 3-13). Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the sinusoidal signal generated by Pham Van Cang into Hurst to perform the well known functions as claimed.

Regarding claim 2, see Figure 3b.

Regarding claim 3, Hurst shows color signals are phase shifted by 120 degree from each other as illustrated in Figure 3a (note trace 2, trace 3 and blanking portion). It

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should be noted that any phase shift for color components could be generated by the one-of-three circuit 24 and phase shifter 11.

Regarding claims 5, 7, 9, see Figures 2a-2d.

Regarding claim 8, in addition of above, the amplitude of the sinusoidal signal in Pham Van Cang can be programmed to rise and fall in any conceivable manner.

Regarding claims 9-18, in addition of rejections above, Hurst requires that each of the color signals be shifted 120 degrees from each other as illustrated in Figures 3a and 3b; however, these signals are not digitally generated. Pham Van Cang teaches the use of memories 19 and 20, read/write memory 8, and an interface computer and controls 10 for generating any imaginable chrominance/luminance test signal (col. 14, lines 3-13). The waveforms of the luminance signal and the chrominance test signal are dictated by the control programs stored in ROM 20 and amplitudes stored in RAM 19. The following are well known advantages of digital over analog. The following are digital advantages over analog. Digital circuits are less affected by noise; digital signals can thus be regenerated to achieve lossless data transmission. Analog signal transmission and processing, by contrast, always introduces noise. Digital systems interface well with computers and are easy to control with software. It is often possible to add new features to a digital system without changing hardware, and to do this remotely, just by uploading new software. Design errors or bugs can be worked-around with a software upgrade, after the product is in customer hands. More digital circuitry can be fabricated per square millimeter of integrated-circuit material. Information storage can be much easier in digital systems than in analog ones. In particular, the

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great noise-immunity of digital systems makes it possible to store data and retrieve it later without degradation. In an analog system, aging and wear and tear will degrade the information in storage, but in a digital system, as long as the wear and tear is below a certain level, the information can be recovered perfectly. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to replace the analog signal generating part of Hurst with the digital signal generator of Pham Van Cang to perform the well known functions as claimed.

## Response to Arguments

- 3. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz, can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

M. Lee

Primary Examiner

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